

## Air flow Balancing

testing  
methodology  
→ end results

Part of the program included an investigation of the wrap-around windbox for possible airflow maldistribution. For many years, the plant operations people had been convinced that a major portion of airflow went to the front of the windbox, leaving rear burners starved. Extensive model testing could not uncover any real problems with the windbox design; however, to improve the turning of air to the rear windbox, baffles were installed behind the air foils in the right and left side supply ducts. It isn't possible to include details of this investigation here, except that it was confirmed by airflow testing of the boiler prior to start-up (after installing the new air registers) a good flow balance was achieved between all air registers. This work again confirmed the need for good working air registers.